RBP Attachment K: State of Hawaii Biosecurity Recommendations

Recommendation	Suggested Action Items
	Develop statewide IAS SAP with input from stakeholders of the state (may be
	possible to utilize HISC strategic plan and HDOA biosecurity plan)
	Update risk assessment for terrestrial IAS using current HDOA data
	Rebuild biosecurity capacity at HDOA to at least 2009 levels (Fill vacated
	position, provide training to get staff up to speed).
	Need to move forward with hiring and training staff members to meet current
	and future expected needs within HDOA quarantine
	HDOA should consider creating and filling a position that will be focused on IAS
	issues. This position may serve as the ISC for HDOA. Could be similar to the
	DOFAW IS coordinator and might serve as the primary point of contact for IS
	issues with the HDOA.
	Document and analyze numbers and types of interceptions from all pathways
	and made available to appropriate agencies and staffs.
	Hire and allocate additional staff and resources to support intra-island
	biosecurity efforts
	Create and institute a mixed model biosecurity approach based on both vector
	sanitation and focusing on key high risk species for all habitats.
Improve Statewide biosecurity and	Develop appropriate vector management with feedback and monitoring
coordination	mechanisms. If INVICTA becomes fully operational it could serve as the
	feedback mechanism.
	Implement a more comprehensive data collection and better data
	management on IAS vectors and pathways, including detailed inspection
	processes, intercept records, preservation and compiling of voucher specimens,
	detailed records on where shipments, etc. are arriving from and specifically
	what is known to have harbored IAS and where it come from and how it
	arrived.
	Enter records into database, analysis and share results with partners as
	warranted.
	Consider helicopters and private planes (or small scale commercial ventures) as
	possible IAS vectors and therefore a biosecurity threat that needs to be appropriately monitored and inspected.
	Identify and include in the development process the appropriate office(s) that
	would be responsible for the planning, development, construction and
	maintenance of cargo staging facilities
	Review relevant biosecurity related guidelines and SOPs to insure they are
	clear, complete, detailed, and in compliance with appropriate laws and
	regulations.
Recommendation	Action Item
	Update existing guidelines and SOPs as needed.
	Improve communication between different levels of government, agencies, and
	others involved in biosecurity work.
	Document the cost of IAS control and management compared to prevention is
	needed.
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	Develop funds to permit completion and validation of a state electronic
	inspection system.
	Better direct use of limited resources based on interception records.
	Provide sufficient funds to conduct routine surveillance, implement response
	plans, and provide outreach and education, in addition to port of entry
	exclusion activities and training for inspectors.
	Identify and establish dedicated, long-term and short term funding to
	implement the various biosecurity recommendations.
	Identify a core level of activities, personnel, and coordination to sustain
	biosecurity and provide long-term continuity.
Improve Statewide biosecurity and	Support increased funding for regional biosecurity so that necessary efforts to
coordination (continued)	prevent, control, and eradicate animal and plant pests and diseases throughout
	the region are effective.
	Implement user fees attached to military related passengers and baggage
	inspections (as needed).
	Conduct Hawaii port and hot spot risk assessments and tie into the RBP once
	completed.
	Conduct an aquatic plant risk assessment that includes potential impacts from
	Micronesia as this aspect is not well covered in the RBP risk assessments.
	HDOA and federal agencies should continue to work together on
	redevelopment of the HDOA detector dog program for port inspections.
	Ensure that the State of Hawaii continues to work with DoD to ensure that
	biosecurity needs are appropriately addressed regarding the potential
	movement of DoD components from Okinawa to Hawaii and any other DoD
	activities.
	Finalize process of merging State and Federal IAS risk lists and establish MOAs
	so that federal agents can react to and enforce state concerns.
Recommendation	Action Item
Improve Statewide biosecurity and	Ensure adequate long-term funding is available for equipment and
coordination (continued)	infrastructure.
coordination (continued)	Establish a central repository for plant pathogens information for the region.
	Join RISC directly or minimally participate in RISC activities as an outside
	Micronesia stakeholder.
	Develop pre-entry requirements for certain commodity imports from high-risk
	areas to reduce the likelihood of pest and invasive species introductions for a
	Regional monitoring and surveillance program.
Improve regional coordination regarding biosecurity and IAS	Establish a biosecurity surveillance system to serve as an early detection
	program for plant, animal, and zoonotic pests and pathogens emerging in
	Pacific Rim countries.
	Support development of standardized SOPs for IAS monitoring and implement
	surveys throughout the region.
	Strengthen regional and international cooperation on the responsible use and
	control of exotic species.
	Develop eradication programs for extremely harmful species already present in
	Hawaii.

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	Conduct a review of both state and federal biosecurity regulations as they
	apply to Hawaii.
	Agriculturally driven regulations should be reviewed and revised to better
	address invasive pests whether they are agriculturally related or not.
	Expand existing or create new regulations (as needed) and SOPs to encompass
Improve laws and regulations	all potential IAS include terrestrial (agricultural and non-agricultural),
	freshwater, and marine concerns.
	Identify the appropriate agency tasked with the regulatory actions to be
	performed as well as the enforcement of any violations contrary to the law.
	Ensure that appropriate biosecurity regulations are in place and enforced.
	Issue penalties and fines to enforce compliance.
	Coordinate work between PPQ, CBP and the Hawaii Department of Agriculture
Increase biosecurity surveillance	in order to develop an adequate level of inspection in Hawaii for both domestic
measures and interception at both	and international goods and passengers.
military and commercial airports and	Request that CBP conduct a realistic risk assessment in order to improve
harbors including all entry points and	targeting of arriving vessels, persons, and cargo.
screening check points.	Search a percentage of all containers, not just those considered to be of high
	risk for agricultural pests.
Recommendation	Action Item
	Address regulations to permit HDOA PQ to inspect containers as needed.
	Find working solution to improve overall inspection levels of goods arriving to
	Hawaii from domestic ports.
	Find working solution to improve inspection levels of housing goods arriving to
	Hawaii from Guam (both directly and indirectly).
	Train personnel in identifying high-risk cargo and handling to reduce
	contamination.
	Track changes in aircraft arrivals, especially as new linkages are established
	and/or additional carriers are added.
	Develop staging areas for safeguarding high and low risk cargo
	Inspect shipping containers and other vessels holding goods as vectors for hitch-
	hiker IAS.
	X-ray all incoming passengers baggage
Increase biosecurity surveillance	Provide training in proper techniques for detecting, collecting, recognizing, and
measures and interception at both	identifying pests to increase inspection and identification expertise.
military and commercial airports and	Train inspectors specifically on livestock, wildlife, and poultry diseases and
harbors including all entry points and	pests.
screening check points (continued).	Training TSA inspectors in IAS detection and capture.
	I failing 13A inspectors in IA3 detection and capture.
	Develop a biosecurity surveillance system for improved data collecting,
	Develop a biosecurity surveillance system for improved data collecting, reporting, and information sharing.
	Develop a biosecurity surveillance system for improved data collecting, reporting, and information sharing. Follow a well-documented process of pest and disease prioritization,
	Develop a biosecurity surveillance system for improved data collecting, reporting, and information sharing. Follow a well-documented process of pest and disease prioritization, surveillance, data collection, and record keeping.
	Develop a biosecurity surveillance system for improved data collecting, reporting, and information sharing. Follow a well-documented process of pest and disease prioritization,

I	Modify surveillance methodology as appropriate for targeted species, (i.e.
	modifying sampling programs to account for behavioral differences in diurnal
	and nocturnal lifestyles).
	Utilize systematic surveillance for plant pests following the model of the
	Cooperative Agriculture Pest Survey (CAPS), and include both military and
	civilian properties as appropriate.
Evaluate social, cultural, economic,	
and ecological values that may be	Conduct baseline surveys.
impacted by invasions by non-native	
species.	
Improve mail biosecurity	Find a working solution which will permit the inspection of US mail (and all
	other mail types).
Recommendation	Action Item
	Develop functional cleaning facilities (wash racks, etc.) at all DoD instillations
	where warranted and provide appropriate training for military personnel to
	utilize these facilities.
	Utilize APHIS training courses or manuals to support wash down efforts.
	Clean containers and conveyances that arrive contaminated with soil and/or
	exotic plant pests
	Evaluate the effectiveness of current cleaning methods, and improve as
	appropriate.
	Conduct inspections of all incoming construction materials including materials
	previously treated or cleaned (due to the potential for recontamination after
Improve biosecurity for the	treatment).
movement of vehicles, equipment	Clean and inspect large, used machines such as tanks and bulldozers intended
	for importation for IAS at points of origin immediately prior to shipping.
	Insure proper cleaning of all large equipment such as construction and military
	items according to APHIS guidelines prior to entry.
	Insure proper cleaning of all large equipment such as construction and military
	items according to APHIS guidelines prior to moving between sites.
	Develop best management practices for contractors and construction sites,
	working with the construction industry to gain support with preventing the
	introduction and spread of non-native plant pests.
	Implement "clean" practices at construction sites, including the minimization of
	land disturbance which may contribute to the spreads plant pests.
	There are no international conventions prohibiting or regulating trade that
	focus explicitly on non-native species and the region should consider
Support regional agreements to limit	developing such regulations for the region which would be supported by all
the movement of known harmful	jurisdictions and prohibit the movement of specific organisms between
species	jurisdictions and possible between islands within jurisdictions. If the region
·	could develop such agreements it might be a step towards developing boarder
	Pacific agreements and even global recognized conventions.
Improve efforts to restore native	Increase restoration efforts of native systems where IAS management and/or
ecosystems and species	eradication efforts have been successful.
Recommendation	Action Item
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Improve efforts to restore native	Localized risk assessments should be conducted for all habitat types.
ecosystems and species (continue)	· ·
	Improve pre-departure cleanliness of items shipped to Hawaii. Orchids from
	Thailand were on item which was pointed out as needing improved pre-arrival
	sanitation.
	Develop stronger pre-border regulations regarding the movement of non-
	native species.
	Biosecurity emphasis should be directed towards audited off-shore hygiene
	systems such as those utilized in Australia and New Zealand. Preventing the
Improve pre-border biosecurity	arrival of potential IAS is ultimately the most cost effective way to ensure
	appropriate biosecurity levels are in place and they offer the best protection
	from the potential hazards which IAS could cause.
	Implement the use of pre-border sanitation compliance agreements with
	shippers and contractors. Consider using HACCP as a model.
	All large, used machines (bulldozers, etc.) which are to be imported should be
	required to undergo through cleaning and inspection for invasive species
	immediately prior to shipping.
Address climate change linkages to	
invasive pests	
Recommendation	Action Item
	Require treatment of all domestic and foreign, military and non-military WPM
	entering Hawaii according to ISPM No. 15.
	Conduct phytosanitary inspection of WPM.
	Inspect thoroughly an adequate percentage of all domestic and foreign, military
	and non-military WPM accompanying agricultural and nonagricultural cargo for
	pests.
	Require consistent inspection methods within SOPs.
Improve WPM capacity	Document all inspections and interceptions.
	Record pest interceptions in an appropriate database to be available for
	analysis that may contribute to safeguarding improvements and quality control.
	analysis that may contribute to safeguarding improvements and quanty control.
	Prohibit the unloading of noncompliant WPM.
	Treat or destroy any noncompliant WPM that is offloaded.
	Treat or destroy infested WPM.
	Treat Infested WPM as regulated garbage and incinerated or sterilized.
	Support a regional approach to switch from WPM to other options such as
	recycled plastics.
	Collect, analyze, establish and maintain baseline data regarding key crops and
	animal stocks for internal consumption as well as for export
	Collect and analyze data regarding both existing pests and pests at high risk of
	invasion
Improve agriculture biosecurity and	Share information on a regular basis within the region and beyond.
food security	5 5

TOOU SECUTITY	Conduct periodic surveys of ethnic markets, pet stores, and grocery stores to identify and intercept prohibited animals and animal and plant products following the model of the USDA-APHIS-PPQ Smuggling, Interdiction and Trade Compliance program.
Ensure that the RBP remains relevant	· · · · ·
by updating recommendation	
components on a regular basis (add	Update the Hawaii section of the RBP regularly and share regionally
new recommendations and remove	
completed elements)	
Recommendation	Action Item
	Support development of a regional communication plan for invasive species
	issues. This plan should be based on existing and proposed IAS infrastructure
	such as the RISC, jurisdictional ISC, and the regional ISC office.
Improve regional communication on	Support development of a regional net of thematic experts to support efforts
invasive species and biosecurity issues	with invasive species. This net should include (but not be limited to) experts in
and support of jurisdictional and	human health, food security, border security, education, planning, IAS
regional efforts	management and control, IAS eradication, IAS detection and response, and
	resource development (funding, etc.)
	Report (to the region) on a yearly basis progress on RBP recommendations via
	MCES, including a written report shared with the region and beyond
Identify knowledge gaps for existing	Develop a priority research list for the state that can be shared with universities
IAS concerns	and others. Such a list could be a positive influence in engaging research
Company the control of the control of the	groups to support management efforts within the state.
Support the establishment of a	Assist with and support regional efforts to develop, fund, and staff a regional
regional invasive species coordination	invasive species coordination office
office. The regional IAS coordination office would serve as a focal point,	Engage the regional invasive species coordination office as the focal point for regional communication and dissemination of invasive species information
coordinating body, communication	Engage the regional invasive species coordination of five to support efforts with
and information center, and training	engaging external resources to support invasive species efforts
Recommendation	Action Item
necommendation	Engage the regional invasive species coordination office to support capacity
Support the establishment of a	building, training, and advice
regional invasive species coordination	Engage the regional invasive species coordination office with supporting
office. The regional IAS coordination	protocol and methods development
office would serve as a focal point,	Engage the regional invasive species coordination office with supporting
coordinating body, communication	establishing ER &RR capacity
and information center, and training	Engage the regional invasive species coordination office to improve information
resource for biosecurity activities	sharing with trade partners outside the region in regards to biosecurity and IAS
throughout the region (continued).	with respect to notification about species that will or might be problematic and
	which could originate from within the region.
Recommendation	Action Item
Support the establishment of a	Engage the regional invasive species coordination office with supporting the
regional invasive species coordination	development of guidelines and regulations
office. The regional IAS coordination	Engage the regional invasive species coordination office with both seeking for
office would some as a facal point	and coordinating regional funding

office would serve as a focal point,	
coordinating body, communication	Engage the regional invasive species coordination office to support
and information center, and training	management, response, and eradication efforts
resource for biosecurity activities	Engage the regional invasive species coordination office to serve as a central
throughout the region (continued).	data center for reporting, analysis, screening, and maintaining records for
	vector activities or non-native species information
Recommendation	Action Item
Support the establishment of a	
regional invasive species coordination	
office. The regional IAS coordination	
office would serve as a focal point,	Engage the regional invasive species coordination office to support outreach
coordinating body, communication	and education efforts
and information center, and training	
resource for biosecurity activities	
throughout the region (continued).	
	Develop an educational strategy that is long term, extensive and nation wide,
	reaching school students as well as all communities. Ensure that outreach
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	efforts are extensive and engage citizenry to support and promote biosecurity
	and management efforts describing approaches to be used to reach the citizenry, organizations, businesses, and visitors (including visiting work forces
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	and foreign business ventures) about potential risks from invasive species and
	methods to prevent, report, and control their introduction. In order to improve
	and expand outreach and awareness efforts, a coordinated approach must be
	utilized to guide activities between the various groups and agencies involved in
	outreach and awareness activities.
	conduct a pre-education survey of residents, visitors, transient workers and
	other stakeholders to gauge their understanding of invasive species, their
	potential impacts, biosecurity regulations, and the role of citizens and visitors
	in regards to protecting the nation from unwanted pests.
	Conduct follow-up surveys and tweak system accordingly to insure long term
Increase outreach and education on	viability and usefulness of the educational strategy
biosecurity and invasive species	Provide information to local communities, businesses and visitors about the
	potential adverse consequences of the introduction and establishment of plant
	and animal pests and diseases and ways to prevent their spread.
	Establish long term funding to support core outreach and educational efforts
	Increase coordinate existing outreach efforts.
	Add invasive species education as a standard part of school curriculums
	Work with the school systems and support efforts to provide educators with
	tools and services to support IAS awareness development as part of standard
	curriculums.
	Support regional coordination of invasive species awareness efforts to improve
	overall regional biosecurity
	Increase engagement of donors and other support programs to develop and
	conduct additional outreach efforts

I	Advertise amnesty/honor bin option by means of mass media outlets as part of
	public outreach.
Do commercial delica	Create awareness of the potential legal consequences of violations. Action Item
Recommendation	
	Distribute multi-lingual biosecurity poster free to pet shops, grade schools,
	universities, sporting goods stores, gardening stores, naturalist clubs, parks and
	natural areas, military facilities, air and sea ports, community centers and
	perhaps even seafood stores, farmers' markets and restaurants.
	Coordinate with contractors employing migrant workers and with overseas
	employment agencies for migrant workers to inform temporary workers about
Increase outreach and education on	the consequences of carrying, mailing, or receiving restricted and prohibited
biosecurity and invasive species	agricultural and wildlife commodities or live organisms by working with
(continued)	contractors and other organizations hiring temporary foreign workers.
(continues)	Inform temporary workers about the consequences of carrying, mailing, or
	receiving restricted and prohibited agricultural and wildlife commodities or live
	organisms by working with contractors and other organizations hiring
	temporary foreign workers. Coordinate with contractors employing migrant
	workers and with overseas employment agencies for migrant workers.
	Communicate the reasons for prohibiting these materials, including the
	potential loss of business if invasive species are permitted to establish.
	Establish formal risk analysis process/guidelines for all organisms used or
	proposed for live trade. Institute a state biosecurity advisory committee to
	review proposals for the importation of exotic species.
	Improve reporting and screening systems for import of live organisms.
	Currently done for most marine organisms and should be expanded to all live
	organisms.
	Ensure that specific quarantine facilities are available and establish specific
	quarantine SOPs for the movement of live organisms (plant and animal,
	including aquatic species)
	Develop plan for containment and control measures in regards to exotic farmed
	and traded species
Reduce risk associated with live traded species	Develop emergency preparedness procedures regarding possible escape of
	exotic organisms being farmed or trade
	Establish legal instruments/framework regarding the responsible use and
	control of exotic species.
	Improve diseases diagnosis and monitoring, as well as epidemiological
	surveillance implementation for farmed organisms
	Ensure that all aquaculture, mariculture, and other captive breeding facilities of
	non-native species are secure including from natural disasters.
	Develop biosecurity standards for household aquaculture set ups and enforce
	these standards.
	Establish explicit aquaculture biosecurity practices (e.g. control of stocking
	densities, use of all-male populations, use of triploids, etc.).
I	Develop specific guidelines for unwanted pets.

Reduce risk associated with live traded species (continued)	Establishment lists of countries and competent authorities in regards to
	introduction and trade of exotic species
	Support regional and international cooperation on the responsible use and
	control of live exotic species.
	Support the regional updating of the RBP every 3 to 5 years
	Support the establishment of a regional DNA barcoding library so that DNA
	analysis can become a more useful tool in identifying non-native organisms
	Support the development of molecular assisted alpha taxonomy surveys with
	standardized protocols which can and are used throughout the region (this
	would be most useful with cryptic marine species)
	Support the development of a algal risk assessment for the region
Support regional biosecurity and	Support the development of a arthropod risk assessment for the region
invasive species control efforts	Support national and regional biosecurity development by documenting and
	sharing success stories with pest species (significant interceptions, eradications,
	successful management strategies, impacts prevented or reduced, etc.)
	Support national and regional biosecurity development by documenting and
	sharing information regarding actual IAS prevention costs and comparing these
	costs with the costs of IAS control and management.
	Support the development of a weeds risk assessment for the region (Hawaii
	already has one, which could be used possibly as a model)
	Establish an MOU between Hawaii and DoD regarding biosecurity actions,
	responsibilities and mitigation in regards to DoD activities and facilities. In
Improve communications and ability	2013 a MOU was developed between DoD and HDOA which is a good start but
to address biosecurity concerns	needs to be expanded.
between US DoD and civilian	Establish SOPs on aspects of how DoD and Hawaii's civilian agencies work
government agencies	together regarding biosecurity inspection process, response actions and other
	activities as needed in response to increased DoD activities.
Establish and enforce biofouling	Establish criteria for in-water cleaning methods for hull fouling that do not pose
	a risk of spreading or releasing non-native organisms (which do not presently
	occur) in surrounding waters.
standards	Establish additional regulations for vessels with long port residency periods.
	Long lay ups increase biofouling potential.
	Establish additional regulations for impounded vessels
Recommendation	Action Item
	Establish standards and regulations regarding biofouling, including inspection
	and certification for all vessels. Inspections can be trained to inspect hulls from
	top side with mirrors. If further inspection is warranted, then the craft pays for
	divers to inspect and make a report. If determined to be dirty, then the craft
	must either be cleaned or leave port and jurisdictional waters. Self clean
	outside of jurisdictional waters could be an option. Hull needs to be clean of all
	organisms, as the ability to identify all marine organisms is not available.

	Develop capacity (personnel, training, and data management infrastructure) to
	conduct hull inspections (including diving as necessary). Consider establishing
	agreements with private industry to support hull inspection processes. For
	example, if a visual inspection determines that further hull examination is
	required, then the ship owner may need to hire local dive operators (that are
	government certified) to inspect the entire hull.
	Establish regulations and facilities for hull cleaning including hull out facilities,
	associated waste disposal, and setting shoreline proximity limits for in-water
	cleaning.
	Establish biosecurity practices and requirements for recreational vessels that
	operate within jurisdictional waters to reduce the transfer of biofouling
Establish and enforce biofouling	organisms.
standards (continued)	Establish the capacity to inspect and treat recreational vessels that operate
,	within jurisdictional waters to reduce associated biofouling to an acceptable
	level.
	Support the establishment of biosecurity practices and requirements for the
	movement of any in-water structure (including FADs, dry-docks, floating docks,
	fixed structures, mobile platforms and drilling rigs, buoys and channel markers)
	to reduce the transfer of biofouling organisms into or within jurisdictional
	waters.
	Establish the capacity (personnel, training, and data management
	infrastructure) to inspect and treat (if necessary) in-water structures that are
	being moved into or within jurisdictional waters to reduce associated biofouling
	to an acceptable level.
	Ensure that any required in-depth inspections or treatments are funding in full
	by the owner/operator. Consider developing a cost recovery system.
	Ensure that regulations include ability to levy and collect fines and/or require
	vessels to depart national waters for repeat offenders and for non-compliance
	with treatment requirements.
	Implement targeted outreach to inform the shipping industry, fishing industry,
	ports, and resource management agencies of biofouling management
	requirements for ships operating within jurisdictional waters.
Parameter dation	
Recommendation	Action Item
Establish and enforce biofouling	Review and revise (as needed) legal authority to implement a biofouling
standards (continued)	management program
	Establish biosecurity practices and requirements for the movement of any
	construction materials that are sourced from marine waters and shores
	(including sand, gravel, rock, coral rubble, and dredge spoils) to reduce the
] ,	transfer of marine organisms into or within jurisdictional waters.
Increase marine system protection	Implement a targeted outreach program with specific guidelines on methods to
from invasive species	minimize species transfers associated with diving gear (whether work or
	recreational) and fishing gear being moved into or within jurisdictional waters.
	Implement a targeted outreach program with specific guidelines on methods to
	minimize species transfers associated with small boats, jet skis, and other water
	sports gear being moved into or within jurisdictional waters.

Implement targeted outreach to inform the shipping industry, ports, and resource management agencies of ballast water management requirements for ships operating within jurisdictional waters.
ships operating within jurisdictional waters.
Establish ballast water management and reporting requirements for all vessels
utilizing ballast water
Ensure that regulations include ability to levy and collect fines for non-
compliance.
Develop the capacity (personnel, training, and data management
infrastructure) to evaluate ballast water management reporting and
compliance
Review and revise (as needed) legal authority to support a ballast water
management program
Support adoption of proposed USCG regulations to move to in hull ballast
water treatment
Action Item
Develop biosecurity standards for ports other than the main air and sea ports.
Implement and enforce biosecurity at ports other than the main air and sea
ports
Conduct a state wide consultation regarding intrastate biosecurity before
attempting to develop capacity and regulations to determine what is actually
needed and what the citizenry will support
Develop a comprehensive reporting system for intra-state biosecurity efforts.
Increase BTS inspection of goods and conveyances arriving from Guam both
directly and indirectly.
Increase ability to respond effectively to alien snake encounter reports, through
improved communication and cooperation with agencies on the ground as well
as external supporters, by increasing the numbers of trained responders
available on all vulnerable islands, by insure that trained responders received
appropriate update training, and by insuring that there are sufficient support
staff to assist primary trained responders.
Re-instate mosquito vector monitoring for infectious diseases throughout the
state.
Develop a generic state emergency response plan (ERP) that is funded and
approved by key agencies and governance. The generic ERP should be readily
modifiable to utilize for terrestrial, freshwater, and marine incursions. The ERP
should list necessary actions in sequence, authorities, partners and available
resources, including funding sources which can be brought to bear immediately
for a response action. Ensure that all appropriate authorities are involved in
the development and planning process including public health authorities for
diseases with serious animal and/or human health and zoonotic potential.
Develop a detection(surveillance) program and response plan for new
incursions by a few focal non-native species of high-risk non-native species,
incursions by a few focal non-native species of high-risk non-native species, ensuring that these specific plans cover freshwater, marine, and terrestrial

I	Develop taxa specific ERPs as needed
	Update all ERPs (both generic and species specific) to ensure that they current
	and functional
	Develop and institute surveillance programs for non-establish species consider
	high risk of arrival such as CRB, alien snakes, fruit flies, tramp ants, etc.
	Provide training to interested citizens with regards to supporting ED & RR
	efforts. Frequency of training events would depend on interest levels but
	minimally there should be one such course per year that can be used to train
	and refresh volunteers from local communities.
Recommendation	Action Item
	Determine which established invasive species are actionable and proceed with
	developing management strategies. Covered in part by national ISAP.
	Train natural resource staffs (including protected areas staffs) at the local level
	in regards to IAS management support.
	Train interested citizens to support IAS management efforts (volunteer citizen
	scientists).
	Conduct surveys on the procurement and use of plants, animals, and their
	products by local communities.
	Develop standardized SOPs for IAS monitoring and surveys
	Conduct regular background field surveys to ensure that knowledge of
	established invasive species and their distributions are current.
	Create community funding sources for local (village level) programs to promote
	environmental awareness and stewardship through local training, education,
	and eradication efforts.
	Support Little fire ant management and eradication efforts with funding and
	resources.
	Conduct delimiting surveys for CRB, followed immediately by a well-developed
Increase management and control of	management strategy and possibly eradication efforts.
established invasive species	Provide funding and other resources immediately for the best possible chance
	at CRB eradication success.
	Address rats, especially their parasites, such as Agrostrongylus patenetus which
	is a major concern for public health
	Improve detection methods for rodents and other wildlife on vessels and in
	cargo.
	Adopt a voluntary code of conduct for nurseries, landscaping companies,
	hotels, and other businesses as appropriate to promote the sale and use of
	locally sourced plants, preferably native plants.
	Encourage businesses to make their staff knowledgeable about invasive plants,
	to inform their customers about invasive plants, to report immediately any
	likely exotic pest organisms found on their premises, and to use native or non-
	invasive plants locally sourced.
	Establish and develop relationships with key industrials such as landscaping and
	pet stores to help develop their ability to institute internal standards to support
l	IAS prevention.

	Improve capacity to carry out investigations and effective enforcement beyond
	ports of entry.
Improve capacity to regulate the importation of live organisms	Develop a government endorsed white list of species permitted for import
	Update white list on a regular basis
	Develop a government endorsed black list of prohibited species
Recommendation	Action Item
Improve capacity to regulate the importation of live organisms (continued)	Update black list on a regular basis
	Ensure that all species proposed for import that are neither black or white
	listed undergo appropriate risk assessment to determine potential impacts.
	Organisms which are deemed potential harmful should be added to the black
	list. Organisms which are deemed non-harmful should be added to the white
	list.
	Develop and update regularly public dissemination of white and black lists as
	well as a details on the risk assessment process for proposed species imports.
	This could likely be done via an existing government website.

^{*}These recommendations do not create any right, obligation or legal responsibility on the part of any of the jurisdictions